The Path to Interoperability:

AOL's Proposed Architectural Design
Based on Five Principles:

- Interoperability for All
- Privacy and Security
- Scalability
- Independence
- User Name Consistency

What Others in the Industry Propose: Multi-Headed Clients

- Consumers create accounts with multiple IM services.

- Multi-headed provider collects consumers' passwords to all accounts.

- Different systems not required to follow same security precautions.

- Interoperability limited to select few networks.

AOL's Commitment to Consumers: Privacy and Security Come First

Summary

- Any Internet consumer can IM with any other today thanks to free distribution of AIM and other IM clients.

- Consumers enjoy a wide array of choices among IM providers, and can use more than one easily.

- Network Interoperability should be achieved the right way -- open to all, with security and privacy protections built in.

INSTANT MESSAGING

Barry Schuler

President,
AOL Interactive Services

July 13, 2000

AOL: The Pioneer
of Instant Messaging

1989 AOL Introduces Instant Messaging, IM becomes one
of most popular features on AOL

1996 AOL Introduces "Buddy List" Feature

1997 AOL Makes IM Technology Available for Free to All
Internet Consumers

1999 AOL Licenses AIM to Others

2000 AOL Offers Proposal for Open and Secure IM to IETF

Internet Instant Messaging Today

**More Than 40 Different IM Programs
Available From Variety of Providers:**

- Yahoo! Messenger -- 125 Million Registered
- ICQ -- 65 Million Registered
- AIM -- 50 Million Registered
- MSN Messenger -- 17 Million Registered
- Tribal Voice -- 5 Million Registered

Instant Messaging Today

- IM is popular community feature, with little to no direct revenue for ISPs and portal services like AOL, Yahoo and MSN.

- Competitors offering stand-alone IM service charge no subscription fees, seek to create revenues through advertising, consumer list sales and developing IM direct-marketing capabilities.

Demonstration

AOL Instant Messaging: How It Works

- Consumer logs in to server, which makes consumer's "presence" known to all on network.

- Consumers notice each others presence through notification system, send messages through server.

IM: The Consumer Perspective

- Community-Based Feature
- Free
- Can Use Multiple Services Simultaneously
- Distributed by consumers to their friends

The Consumer Perspective:Free

File Edit View Favorites Tools Help

Address http://messenger.yahoo.com/

YAHOO! Messenger

Yahoo! Messenger

Quick Download
- Windows NEW!
- Macintosh (OS 8.5)
- Java (Unix, Other Mac)
- Palm
- Windows CE
- Mobile Phone (Beta)

Search For Friends

[   ] Find
- ⊙ Yahoo ID
- ○ Real Name

Tools
- Invite a friend to use Messenger!
- Manage Friend Lists

Need Help?
Find answers to your questions in our Help Center.

Instantly communicate with

Instant messaging allows you to qui friends. Unlike email, instant messa

By downloading the Yahoo! Messeng your computer, you can send instan well as use these features:

- Voice chat and file transfer
- Alerts for your stock quotes, messages, and Calendar app
- News, Weather, Stock Quote Scores.
- And so much more...

Get it Now

What's New with Messenge
- Start talking to people now
- Add Messenger to your webp
- Create your own personalized
- Get Messenger in other langu
- Yahoo! Member Directory hel interests.

Address Book - Alerts - Auctions - Bill Pay - Bookmarks - Briefcase - Broadcast -
Games - Greetings - Home Pages - Invites - Mail - Maps - Member Directory - Mes

AOL.COM

▸ AOL Mail ▸ My AOL.COM ▸ People/Chat ▸ Search ▸ Shop ▸ Web Centers ▸ Try AOL FREE!

You are here: Home > AOL Instant Messenger[sm]

AOL Instant Messenger[sm]

Get AIM Now!

New Users Click Here

Download:
Windows 4.0
Windows CE 1.0
Mac 4.0
Windows Beta
Mac Beta

About AIM

About Instant Messaging
About AIM 4.0
About AIM Remote
About Quick Buddy
Sneak Previews
AIM International

AIM Phone Card

Welcome

New AIM 4.0 - Available Now

The AOL Instant Messenger[sm] service is the No. 1 way to talk to your friends on the Internet--and the best just got better! We've added powerful new features designed to make managing your time online more fun and convenient. Find out what over 59 million people already know, that AIM is the easiest way to:

- **Receive instant alerts**
- **Send instant messages**
- **Share photos, pictures and sounds**
- **Enjoy live conversations online - FREE**
- **Chat with friends and family or people with similar interests**
- **Stay on top of the news and stocks**

Find out more about AIM 4.0

New Users Click Here!

Current AIM users click here!

GET IT NOW!

UPGRADE!
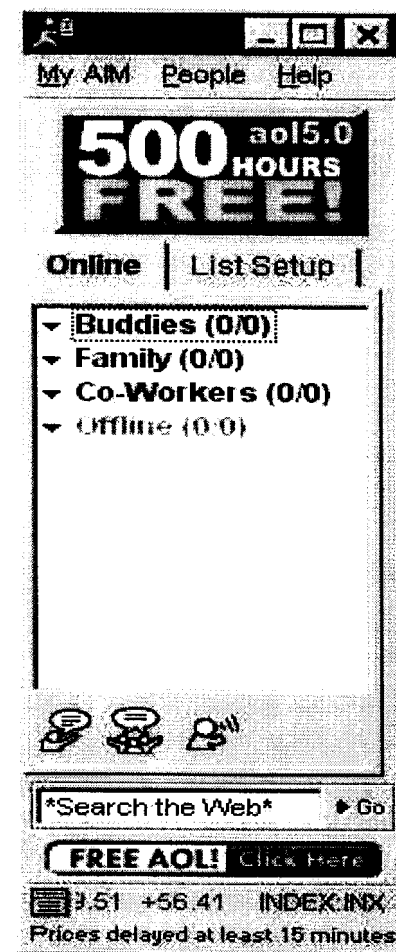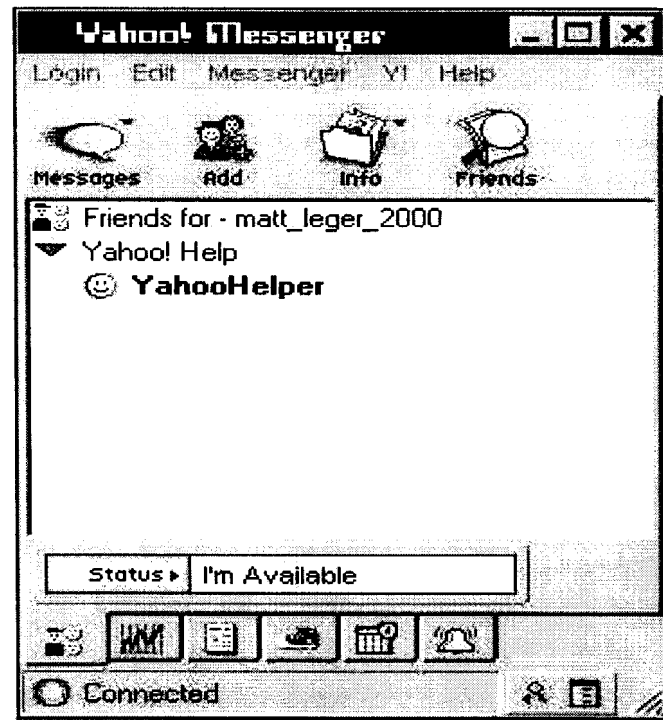
The Consumer Perspective:
Can Use Multiple Services
Simultaneously

Comparison: IM and E-Mail

Instant Messaging	E-Mail
• Real-Time: Messages Appear Immediately	• Messages Read on Demand
• Consumers Can Notice Others' Presence	• No Presence Information Needed

Comparison: IM and Telephone

Instant Messaging

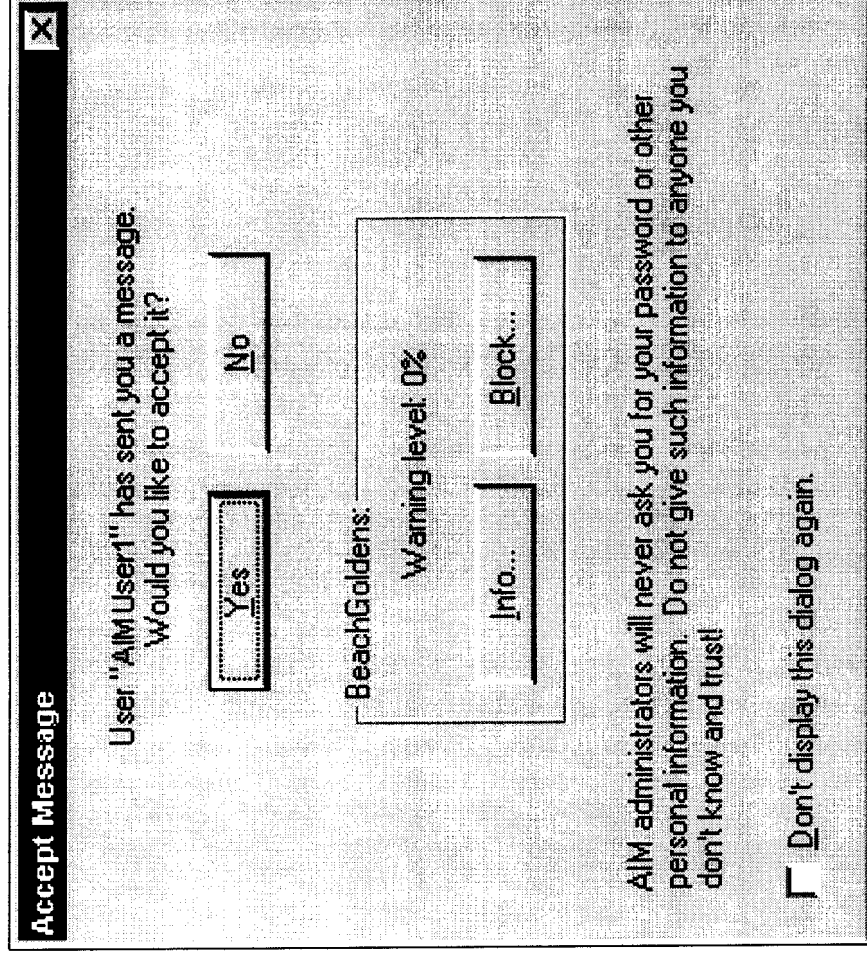- Multiple Services Flourish

- Free Service
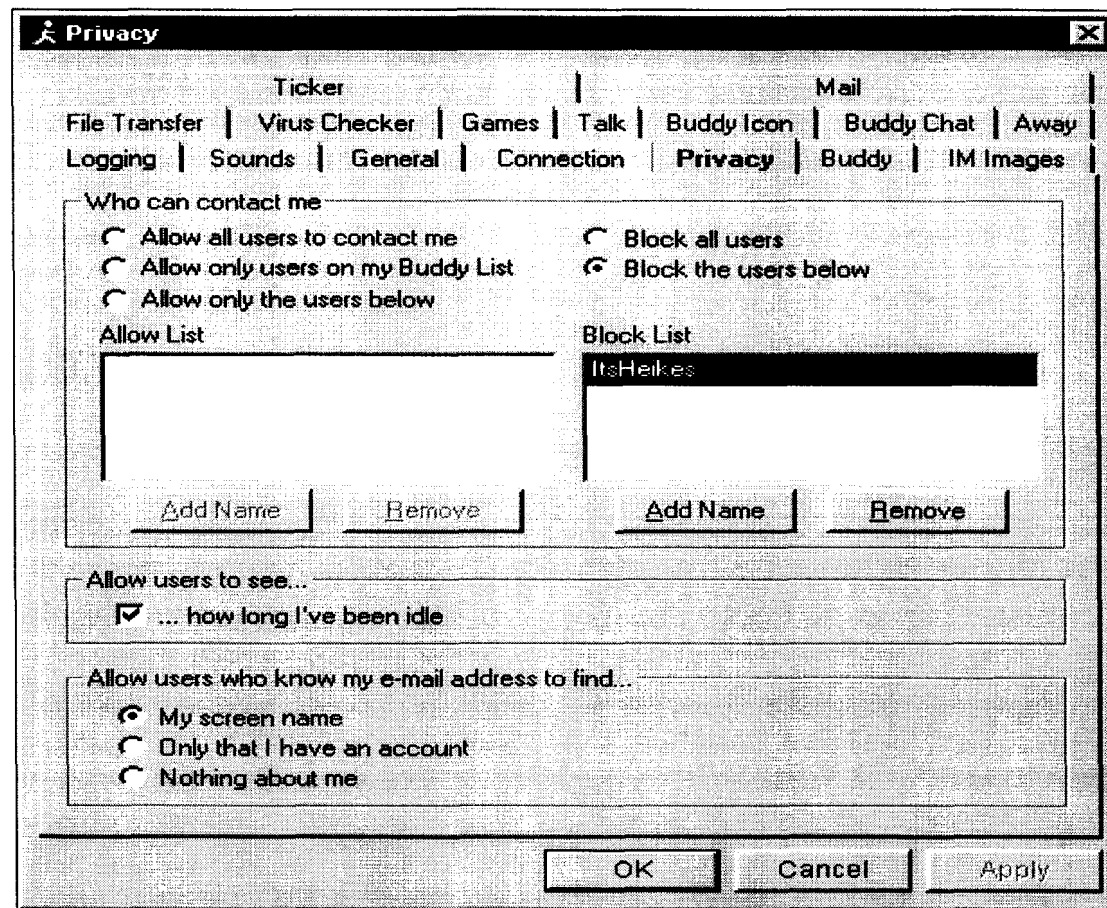
Telephone

- Local Monopolies

- Fee-based Service

Member Privacy and Security a Top Priority for AOL

AOL Instant Messaging Users Can Block Unwanted Messages

Accept Message

User "AIM User1" has sent you a message.
Would you like to accept it?

Yes No

BeachGoldens:

Warning level: 0%

Info... Block...

AIM administrators will never ask you for your password or other personal information. Do not give such information to anyone you don't know and trust!
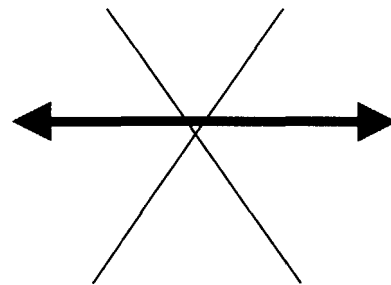
☐ Don't display this dialog again.

AOL Instant Messaging: Protects Users' Privacy

Protecting Members' Safety
Is Paramount

No Interoperability With ICQ Until
Security and Privacy Guarantees
are Established

Why Pursue Interoperability?
Three Approaches to IM Service

Portal Feature   Operating System Feature   Stand-Alone Service

Interoperability:
The History of E-Mail

- Internet E-mail initially available only within proprietary systems.

- Over time, industry developed standards for communication between users of different systems.

- Potential hazards not anticipated: no protections built into standards against SPAM or other threats to consumer privacy and security.
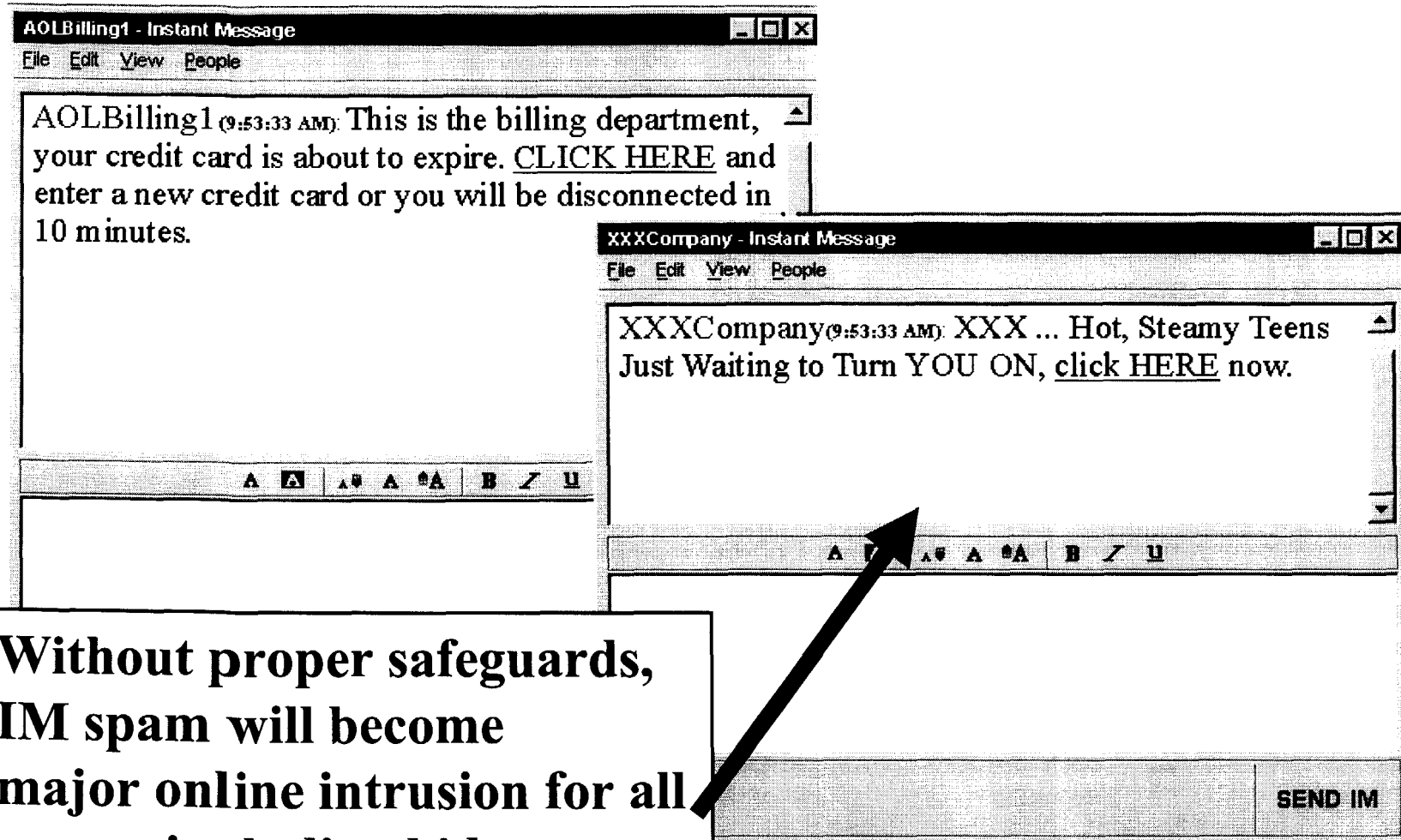
SPAM, E-Mail Viruses, and Hacking are Serious Industry Problems

•   All e-mail systems confront SPAM and other intrusions daily. AOL blocks many SPAM mails from known spammers, but issue remains source of consumer complaints.

•   Recent viruses such as Love Bug highlight high risk of mail-borne viruses.

•   Hackers use e-mail to break into sensitive computer systems.

Spamming in Real Time is even more intrusive and dangerous

AOLBilling1 - Instant Message

File   Edit   View   People

AOLBilling1 (9:53:33 AM): This is the billing department, your credit card is about to expire. CLICK HERE and enter a new credit card or you will be disconnected in 10 minutes.

XXXCompany - Instant Message

File   Edit   View   People

XXXCompany(9:53:33 AM): XXX ... Hot, Steamy Teens Just Waiting to Turn YOU ON, click HERE now.

SEND IM

Without proper safeguards, IM spam will become major online intrusion for all users - including kids

Achieving Interoperability while Protecting Consumers

The Standards Process

- IETF -- Internet Engineering Task Force -- is International community of network designers, operators, vendors, and researchers.

I E T F

- Appoints working group to study issue -- industry and other participants asked to submit ideas, which are discussed until consensus is reached.

IETF Work on Instant Messaging

1998   **Working Group on Instant Messaging Established**

April 2000   **Working Group put into "hibernation" due to lack of progress.**

June 2000   **AOL submits architecture for interoperability. Only proposal from major IM provider.**

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AOLTV
Launching a New Era in Television

Barry Schuler

President, Interactive Services Group

America Online
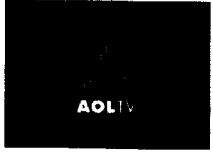
Interactive TV: An Idea Whose Time Has Finally Come

- Interactivity becoming central to consumers' everyday lives

- People want convenience of interactivity across multiple devices for easy access

- Research shows consumers already going online while watching TV

Mass market consumers ready for interactive TV

AOLTV: How it Works

AOLTV

SATELLITE

CABLE MODEM

SET TOP BOX

CABLE BOX

PHONE

DSL

TV
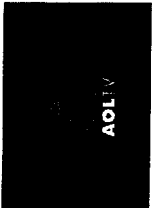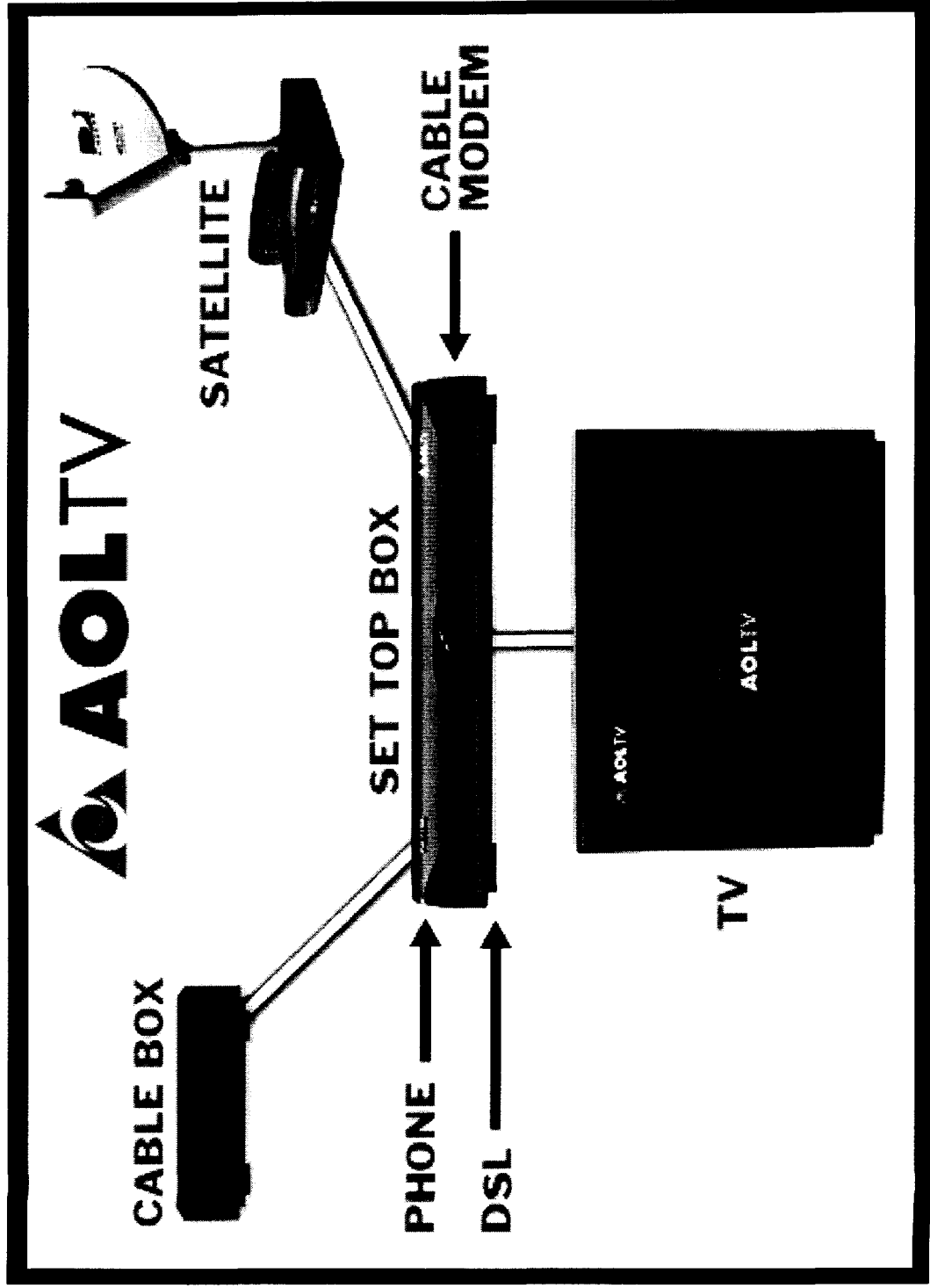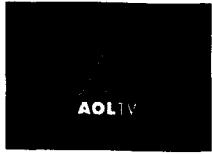
AOLTV

AOLTV: Benefits for Consumers and TV Industry

- Enhances TV viewing with interactivity to enable multi-tasking

- Brings popular AOL features to TV experience

- Makes television easier to navigate

- Provides TV industry new platform for its interactive content and ad/e-commerce

- Commits to open standards and consumer choice

*The AOLTV experience driven by consumers*
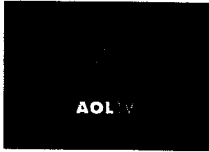
AOL TV

AOLTV - Not Just
# Internet on TV Set . . .

Extending Best of Interactivity to TV:

⇒ Convenience Features

⇒ Virtual Channels Offer More Consumer Choice

⇒ Community of 23 Million AOL Members

⇒ Content and Ad/E-Commerce to Complement TV
   Programming

*AOLTV will make the television more useful and
valuable device for home and family*
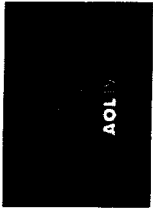
Three Components of AOLTV

- Navigation
- Your AOL Features designed for TV
- Enhanced TV

AOL
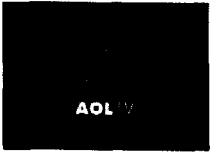
Navigation

With Today's Hundreds of Channels, AOLTV Makes It Easy for Consumers to Find What They Want to Watch . . .

TV Will Be Surfable Again!

AOLTV Makes Television Easier to Navigate

AOLTV Program Guide enables consumers to:

- Organize TV channels by category

- Explore new Virtual Channels

- Request on-screen reminders for favorite shows

- Automatically set VCRs to tape programs

- Review program summaries 3 days ahead of time

- Access via any device connected to AOL

Others program guides already being developed:
14 million consumers using DirecTV's program guide

AOLTV Brings Popular
AOL Features to TV Experience

- AOL Screen Name
- AOL E-mail
- AOL Buddy List and Instant Messaging
- You've Got Pictures
- AOL Calendar
- AOL Parental Controls
- AOL Favorite Places
- AOL Portfolios

*And it's up to consumers to decide how and when
to use these convenient features*
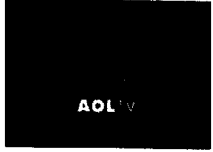
AOLTV Provides Exciting New Platform for Television Industry.

AOLTV Supports ATVEF Streams and Access To the WWW on TV Without a Commercial Relationship Required.

TV Industry's Content Opportunity on AOLTV

*AOLTV Enables TV Programmers to Provide:*

- In-depth background for news and sports programming

- Interactive polls

- Chats with TV stars

- Emergency information during natural disasters and other public service announcements

Advertising/E-Commerce to Complement TV Programming

AOLTV Enables TV Programmers to:

- Offer e-commerce opportunities linked directly to the shows on-screen

- Extend the impact of television ads

- Generate new advertising revenue streams

- Build an exciting new generation of interactive content
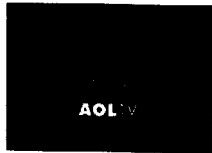
AOLTV Built on Open Standards

- Open standards ensures content will be accessible on other interactive TV services
- Licensable software from Liberate Technologies
- Support for set-top boxes that accommodate multiple interactive TV services

Open standards key to growing entire interactive TV industry
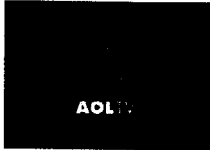
AOLTV Provides Consumer Choice

- Full support for content diversity in both TV and interactive programming

- Seeking to partner with all broadcast and cable TV networks

- Non-discriminatory listings of channels in Program Guide categories

- Viewer controls what is on the TV screen - e.g. picture in picture, resized picture

Consumers will decide success of this new industry
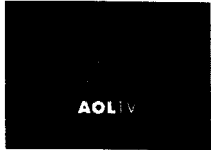
AOLTV Success Depends On Building a Large Audience.

This Will Occur by Providing Consumers with the Most Choice and Diversity Possible in TV and Interactive Content.